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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,483	04/16/2001	Majid Anwar	PGLD-P01-008	6196
28120	7590	06/17/2004	EXAMINER	
ROPS & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			GOOD JOHNSON, MOTILEWA	
			ART UNIT	PAPER NUMBER
			2672	9

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/835,483	ANWAR, MAJID	
	Examiner Motilewa A. Good-Johnson	Art Unit 2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 April 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,5-15 and 49-60 is/are pending in the application.
- 4a) Of the above claim(s) 54 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,5-15,49-53 and 55-60 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2, 4.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. This office action is responsive to the following communications: Application, filed 04/16/2001; IDS, paper #2, filed 08/27/2001; IDS, paper #4, filed 11/27/2001; Preliminary Amendment A, filed 04/11/01; Amendment B, filed 04/02/2004.
2. Claims 1-3, 5-15 and 49-60 are pending in this application.
3. The present title of the application is "System and Methods for Generating Visual Representations of Graphical Data and Digital Document Processing" (as originally filed).

Election/Restrictions

4. Applicant's election without traverse of Group I in the reply filed on 04/02/04 is acknowledged.
5. Newly submitted claim 54 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 54 discloses dividing a document into zones and generating a list for overlapping in each zone, intersection in the document and processing objects to generate a representation. The elected claims disclose representing a scaled display having reduced resolution and do not recite overlapping and intersecting zones of a document.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 54 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 5-15, 49-53 and 55-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Scott et al., U.S. Patent Number 6,545,687 B2, "Thumbnail Manipulation using Fast and Aspect Ratio Zooming, Compressing and Scaling", class 345/629, 04/08/2003, filed 01/05/1998.

Regarding claim 1, Scott discloses a method of redrawing a visual display of graphical data whereby a current display is replaced by an updated display, comprising (col. 14, lines 16-19) in response to a redraw request, replacing the current display with a first approximate representation of the updated display, (col. 2, lines 20-26) wherein said first approximate representation comprises a scaled version of a reduced resolution bitmap representation of said updated display, (col. 2, lines 25-26) generating a final updated display and replacing the approximate representation with the final updated display. (col. 2, lines 30-33)

Regarding claim 2, Scott discloses replacing said first approximate representation with one or more successive improved approximate representations of the updated display before replacing a last displayed approximate representation with a final updated display. (col. 2, lines 25-34)

Regarding claim 3, Scott discloses wherein the replacement of the current display by said first and any subsequent approximate representations is performed in parallel with generating final updated display. (col. 10, lines 55-59)

Regarding claim 5, Scott discloses a subsequent improved approximate representation comprises said scaled version of a reduced resolution bitmap representation of said updated display with vector outlines superimposed thereon. (figures 4 and 5A)

Regarding claim 6, Scott discloses generating variable visual representations of graphical data by dividing graphical data into a plurality of bitmap tiles of fixed size, storing said tiles in an indexed array and assembling a visual representation of said graphical data from a selected set of said tiles. (col. 26, lines 35-44, a region is partitioned into sub-regions, i.e. tiles, col. 3, lines 61-67, the coded versions may be cached, i.e. stored, at particular sizes, i.e. visual representations, to provide the selected desired size, col. 3, lines 50-60)

Regarding claim 7, Scott discloses a current visual representation of said graphical data is updated by removing redundant tiles from said selected set and adding new tiles to said selected set. (figure 9)

Regarding claim 8, Scott discloses said array of tiles represents graphical data from multiple sources. (figure 8, col. 5, line 54- col. 6, line 5)

Regarding claim 9, Scott discloses multiple sources include applications running on a data processing system and an operating system of said data processing system. (figure 14)

Regarding claim 10, Scott discloses including subsets of said tiles in parallel. (figure 6, element 35)

Regarding claim 11, Scott discloses tiles are assembled into a visual display, such that a current display is replaced by an updated display, comprising a first approximate representation of the updated display. (figures 5A and 6)

Regarding claim 12, Scott discloses graphical data corresponds to a digital document (col. 17, lines 55-56) composed of a plurality of graphical objects arranged on at least one page, further comprising: dividing said document into a plurality of zones; (col. 26, lines 35-44, a region is partitioned into sub-regions) and for each zone, generating a list of objects contained within and overlapping said zone. (col. 18, lines 40-35-54, creating a hierachal representation of the thumbnail, which Examiner interprets as a generated list of overlapping in each zone)

Regarding claim 13, Scott discloses a visual representation of a part of said document is generated by determining which of said zones intersect said part of said document, determining a set of said listed objects associated with said intersecting zones that are contained within or overlap said part of said document, and processing

said set of listed objects to generate said visual representation. (col. 2, line 62 – col. 3, line 3)

Regarding claim 14, Scott discloses visual representations of said document are generated having a current display be replaced by an updated display, comprising a first approximate representation of the updated display. (col. 2, lines 25-33)

Regarding claim 15, Scott discloses dividing the graphical data into a plurality of bitmap tiles of fixed size, storing said tiles in an indexed array and assembling the visual representation of said graphical data from a selected set of said tiles wherein each of said zones corresponds to at least one of said tiles. (col. 26, lines 35-44, a region is partitioned into sub-regions, i.e. tiles, col. 3, lines 61-67, the coded versions may be cached, i.e. stored, at particular sizes, i.e. visual representations, to provide the selected desired size, col. 3, lines 50-60)

Regarding claim 49, Scott discloses a handheld device having a graphical interface capable of redrawing graphical data comprising a display memory (col. 2, lines 41-42) for storing data representative of a document being displayed, a second memory (col. 3, line 66) for storing a scaled version of a reduced resolution bitmap representation of said document being displayed, (col. 3, line 64, a cache, i.e. memory) and a module capable of detecting an instruction (col. 3, lines 26-30) to alter an aspect of the document being displayed, and in response thereto replacing the current display with the reduced resolution image, (col. 7, lines 11-28) generating a final updated display and replacing the reduced resolution bitmap representation with the final updated display. (col. 8, lines 20-26)

Regarding claim 50, Scott discloses a processor (col. 5, lines 61-62) for replacing said first approximate representation with one or more improved approximate representations of the updated display. (col. 8, lines 1-16)

Regarding claim 51, Scott discloses an improved approximate representation includes said scaled version of a reduced resolution bitmap representation of said updated display. (col. 14, lines 1-31)

Regarding claim 52, Scott discloses a processor for: generating variable visual representations of graphical data; for dividing graphical data into a plurality of bitmap tiles of fixed size; storing said tiles in an indexed array; and assembling a visual representation of said graphical data from a selected set of said tiles. (col. 26, lines 35-44, a region is partitioned into sub-regions, i.e. tiles, col. 3, lines 61-67, the coded versions may be cached, i.e. stored, at particular sizes, i.e. visual representations, to provide the selected desired size, col. 3, lines 50-60)

Regarding claim 53, Scott discloses updating the indexing of said array to remap tiles in the array to locations on the display. (col. 22, lines 51-59, repeating the check of a current bit level to output a coded representation into a selected region in the coded representation, and further in col. 3, lines 50-40, the coded versions may be cached)

Regarding claim 55, Scott discloses a view of a bitmap is updated by scaling the bitmap from a first resolution to a second resolution using interpolation. (col. 9, lines 3-8)

Regarding claim 56, Scott discloses the first approximate representation of said updated display is generated and stored prior to the redraw request. (col. 2, lines 25-34)

Regarding claim 57, Scott discloses replacing the current display with the first approximate representation of the updated display further comprises increasing the size of the stored first approximate representation by a scaling factor (col. 14, lines 20-25) while maintaining the resolution of the first approximate representation, thereby generating the scaled version of the reduced resolution bitmap representation. (col. 7, lines 11-28)

Regarding claim 58, Scott discloses the visual display includes a first image and wherein the updated display includes a second image. (col. 20, lines 50-55)

Regarding claim 59, Scott discloses the second image is a modified version of the first image. (col. 7, lines 22-24)

Regarding claim 60, Scott discloses the second image is a different image than the first image. (col. 20, lines 50-55)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is (703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Motilewa A. Good-Johnson
Examiner
Art Unit 2672

mgj